OVERVIEW

In-ground high power LEDs can be mounted in-ground or in-wall. These are available in Ultra Bright and Standard Bright options. Perfect for patios, garden walls, decks, docks, gazebos, and many other locations.

aspectLED’s in-ground/in-wall recessed lights are bright, energy efficient, and attractively styled, making them perfect for virtually any application. Ideal for installation in stair safety/accuteness lighting, garden walls, building entrances, pathways, decks, gazebos, public parks, docks, and marine environments.

These recessed in-ground/in-wall lights are waterproof (with an IP67 rating) and feature a #304 stainless steel trim and aluminum body. These lights come standard with a clear glass trim with stainless steel bezel.

MODELS

<table>
<thead>
<tr>
<th>In-Ground Model</th>
<th>SKU</th>
<th>Wattage</th>
<th>Luminous Flux</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 LED Large-Standard Brightness</td>
<td>AL-IG-L-6</td>
<td>6 Watts</td>
<td>550 Lumens</td>
<td>6.5” diameter 4.75” deep</td>
</tr>
<tr>
<td>6 LED Large-Ultra Brightness</td>
<td>AL-IG-L-18</td>
<td>18 Watts</td>
<td>1050 Lumens for Single Color 1000 Lumens for RGB</td>
<td>6.5” diameter 4.75” deep</td>
</tr>
<tr>
<td>9 LED Large-Standard Brightness</td>
<td>AL-IG-L-9</td>
<td>9 Watts</td>
<td>900 Lumens</td>
<td>6.5” diameter 4.75” deep</td>
</tr>
<tr>
<td>9 LED Large-Ultra Brightness</td>
<td>AL-IG-L-27</td>
<td>27 Watts</td>
<td>1500 Lumens for Single Color 1350 Lumens for RGB</td>
<td>6.5” diameter 4.75” deep</td>
</tr>
<tr>
<td>Compact-Ultra Bright (Flat Bezel)</td>
<td>AL-IG-CF-3</td>
<td>3 Watts</td>
<td>175 Lumens for Single Color 160 Lumens for RGB</td>
<td>2” diameter 3.2” deep</td>
</tr>
<tr>
<td>Compact-Ultra Bright (Tapered Bezel)</td>
<td>AL-IG-CT-3</td>
<td>3 Watts</td>
<td>175 Lumens for Single Color 160 Lumens for RGB</td>
<td>2.5” diameter 3.2” deep</td>
</tr>
<tr>
<td>3 LED Medium-Ultra Bright</td>
<td>AL-IG-M-9</td>
<td>9 Watts</td>
<td>520 Lumens</td>
<td>4” diameter 4.62” deep</td>
</tr>
<tr>
<td>Small-Ultra Bright (Round Bezel)</td>
<td>AL-IG-SR-3</td>
<td>3 Watts</td>
<td>175 Lumens for Single Color 160 Lumens for RGB</td>
<td>2.5” diameter 3.75” deep</td>
</tr>
<tr>
<td>Small-Ultra Bright (Square Bezel)</td>
<td>AL-IG-SS-3</td>
<td>3 Watts</td>
<td>175 Lumens for Single Color 160 Lumens for RGB</td>
<td>2.5”x2.5” bezel 3.75” deep</td>
</tr>
</tbody>
</table>
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>12VDC or 24VDC or 100-240VAC</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>Model Dependent</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>-40°F<del>113°F (-20°C</del>45°C)</td>
</tr>
<tr>
<td>Beam Angle</td>
<td>30°</td>
</tr>
</tbody>
</table>

**TOOLS YOU’LL NEED**

- Tape Measure
- Wire Stripper
- Shovel
- Screw Driver
- Allen Wrench

**BEFORE YOU BEGIN**

We know how boring it can be to read instructions, so we'll keep this installation guide as short and sweet as possible. Before you begin with your installation, be sure to fully read these instructions. They contain many useful tips and pointers that will help to ensure a perfect installation, save you time, and ensure your safety.

It is important that you install this product (and all other electrical products) in accordance with the National Electric Code (NEC) and all applicable local building and electrical codes for your area. If you are unfamiliar with the NEC, your local building/electrical codes, and/or the proper installation methods for electrical devices, you should hire a qualified and licensed electrician to do the work for you.

Before beginning any electrical work, always disconnect power at the fuse or circuit breaker.
IMPORTANT CONSIDERATIONS

• Keep fixture lens area clear and free from dirt, dust, plants, leaves, and any other kind of obstruction to allow proper operation and optimize light output.

• Make sure trim is flush to 1/8” above finish grade to prevent water from accumulating on lens, appropriate drainage must be provided.

• Use of accessories not recommended by aspectLED may cause an unsafe condition and void warranty.

• Always use UL listed waterproof wire connectors when making electrical connections.

• Make sure to seal all conduit entries by using Teflon tape or silicone on threads.

• In-ground LED lights are rated for use outdoors where it will be exposed to rain, humidity, and moisture. However, fixtures are not to be immersed in water.

• Always consult a wire gauge chart to determine the correct size wire for your application. Wire gauge is dependent on voltage drop, amperage rating, and environment. Incorrect wire selection could overheat systems and cause a fire.

• Always ground the conduit system in accordance with local and national electrical codes.

• This fixture is suitable for in-ground, concrete pour, brick, and masonry installations.

• Low voltage options require a remote step down transformer.
SYSTEM DIAGRAM

DMX SYSTEM

POWER SUPPLY

DMX CONTROLLER

3 PIN FEMALE DMX

IN-GROUND LED FIXTURE

3 PIN MALE DMX

DMX DECODER
REMOTE CONTROL SYSTEM

POWER SUPPLY

TOUCH CONTROLLER

IN-GROUND LED FIXTURE
MEDIUM IN-GROUND/IN-WALL

φ 4.13 in

3.40 in

4.50 in
COMPACT IN-GROUND/IN-WALL

1.96in
1.46in

2.56in

3.13in

Ø2.82in
In-Ground LED Light Installation Guide

INSTALLATION

1. Determine a suitable location to install the 3 components as labeled in System Diagram

   ![Controls](image1)
   ![Power Supply](image2)
   ![LED Light Fixture](image3)

   This will include suitable wire installed between the power supply, the LED light fixture, and any controls. It is important to choose the correct wire for the specific application, this is dependent on voltage drop, amperage rating, and environment. Please consult a voltage drop and wire sizing chart to determine adequate wire size. Using the incorrect wire size will damage your products! If installing by method of direct burial, always use direct burial-rated wiring.

2. Dig appropriate amounts of holes and trenches for light fixtures and power supplies. The diameter of the hole should be 6 inches greater than the diameter of the fixture and the depth should be 8 inches deeper than the height of the fixture. Remember to consult local code for trench depth requirements

3. Backfill holes with 8 inches of pea gravel for drainage. Place fixture into hole and fill remaining volume with pea gravel to ensure a secure fit and proper drainage. If installing in concrete, instead of filling remaining volume with pea gravel, use standard masonry techniques to pour concrete slabs. Allow for concrete to set before proceeding to next steps.
SOIL INSTALLATION

- Liquidtight fitting
- Conduit
- 8 in pea rock

Diagram showing the placement of the light fixture, conduit, and pea rock layer for soil installation.
CONCRETE INSTALLATION

1/8 in

liquidtight fitting

conduit

8 in pea rock

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4. Decide whether you’d prefer to install via direct burial or by way of conduit fittings. This is entirely based on preference. If installing via direct burial, skip ahead to step 8.

5. Feed appropriate wire through conduit and into housing of in-ground light fixture. Make secure wire connections using UL listed waterproof silicone filled wire nuts.

6. Use mastic putty or Teflon tape around threads of liquidtight conduit connector and housing to create waterproof connection as shown in Figure 1.

7. Arrange connected wires and wire nuts to bottom of housing unit before pouring silicone rubber sealant or potting compound into base of unit, making sure to submerge wire nuts in sealant as shown in Figure 1. Follow sealant instructions and allow proper set time.

Figure 1. Mastic putty or Teflon tape can be used to secure the connection between the housing unit and connector. Wire nuts are to be submerged in the silicone rubber sealant.
8. Coil any extra lead wire below the fixture and carefully place lighting fixture into the housing unit, making sure there is a slight grade for water run off.

9. Secure fixture to housing using the appropriate screws, either a hex cap or Phillips, and an Allen wrench or screwdriver. Make sure to securely tighten fixture and bezel to ensure water resistance.

10. Attach the power supply and any controls by referring to the System Diagram and installation guides for both the drivers and controls available at www.aspectled.com.
   a. Remember to use suitable copper wiring between all components by referring to a voltage drop and wire sizing chart.

11. Repeat with additional fixtures.

12. Once you’ve finished, double check all connections and turn on power to your circuit. Test functionality of your installation. If you experience issues, see the trouble shooting guide on page 16, or contact technical support at (888) 503-1317 option 3 or support@aspectled.com.

13. Congratulations! You’ve successfully completed the installation process. Once your light is installed, your project is finished. Now is a great time to take a moment to sit down and enjoy your favorite beverage while giving yourself a pat on the back for a job well done.
## TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
</table>
| Some lights are not functional             | • Ensure all connections have been attached properly. Make sure that there are no drainage issues and fixtures are not submerged in water.  
  • Make sure RGB wires are connected to the proper terminals on the controls. Namely, blue to B and black to V+.  
  • Make sure that a constant voltage power supply is used and NOT an MLV. |
| Lights are flickering                      | • Check that a compatible driver is installed. Ensure controller is not on dynamic mode. Verify that +/- connections of DMX systems are not reversed.  
  • Check for loose connections and that strip light connectors are attached correctly. Strips vary in width so it is important that compatible models are used and consistent polarity is maintained. |
| Lights are turning on/off repeatedly       | • Ensure the driver is not overloaded. An overloaded driver will trip the internal auto-reset repeatedly, turning the system on/off. |
| Installation trips main breaker            | • Check wiring for a short circuit. If breaker continues to trip, there might be a short in your circuit. Call us at (888) 503-1317 option 3 or email us at support@aspectled.com for a new driver. |

## HAVE QUESTIONS OR NEED ASSISTANCE?

We’re always here to help!

Feel free to contact our electrician’s help desk at (888) 503-1317 option 3, or support@aspectled.com.